

April 2001 Grower Appellation Meeting

A. What It Is session:

Description of pest and damage using field samples and Pest ID Sheets developed by Rhonda Smith and Lucia Varela.

- a. Thrips
- b. Phomopsis
- c. Sharpshooters – No winners in the counting contest.
- d. Mites

B. Discussions:

- a. Phomopsis – Lime sulfur delayed dormant treatments for chronically infected areas, also pruning out diseased wood. Growing season treatments must be prophylactic since no materials clean it up, i.e. treating when you see symptoms is too late. Don't use mancozeb, dithane after a rain. You are wasting your money and throwing a Prop.65 material needlessly into the environment. If you must treat after a rain, think about using an alternative material, such as copper/sulfur or strobilurin. Low incidence so far this year.
- b. Blue-green Sharpshooters – Be certain you have PD before treating. You can trap BGSS anywhere in the county, but only certain areas actually have PD. If you are trapping in the riparian area, do not treat your vineyard based on those counts. Only treat your vineyard when traps in the vineyard show BGSS moving on to the vines. There is a new UC publication on PD available at the Farm Advisor's office (\$6), useful for newcomers and old-timers to grape growing.
- c. Thrips – Damage threshold reached in some vineyards due to cold weather, frost damage, cover crop mowing, and (in some cases) trying to develop spur positions. Imidacloprid and dimethoate were the conventional materials of choice. Softer materials would include oil, soap, cinnamic aldehyde, avermectin, neem oil, kaolin clay.
- d. Mites – Early Pacifics and Willamettes. Check for predaceous mites, too.
- e. GLH – Watch where overwintered adults are moving into the vineyard by noting where feeding damage is heaviest. Plan on monitoring for nymphs in these areas.

May 2001 Grower Appellation Meeting notes

A. What Is It?

The Pest ID sheets and live samples were used as examples for the following pests:

- Old Thrips Damage
- Phomopsis
- Blue-green sharpshooters. Four yellow sticky traps with known BGSS numbers were available to brush up everyone's counting skills.
- Mite damage, larvae and adults. Telling Willamette mites from Pacific mites is an acquired skill, but can be done with practice.

B. Old Biz:

- Thrips – Did you need to treat? Probably not. A few folks felt they needed to because of developing spur positions on slowly growing, lower vigor blocks. It would be instructive to leave four rows or so untreated to evaluate the real effectiveness.
- Frost – Anyone seeing botrytis on frost damage?

C. New Biz Discussions:

- Mites
 - i. Willamette mites are predominating over Pacifics now.
 - ii. General Mite Monitoring
 1. Look for damage on the top surface of leaves, and actual mites on the lower surface during your general vineyard monitoring. Check basal leaves (at or below the clusters). If mites are present on basal leaves, check mid-canopy. If mites are present mid-canopy, check the upper canopy.
 2. Divide the block into mite monitoring units. If you will treat based on counts obtained over the whole block, then treat the block as one unit. If you will spot treat, divide the block into units that will delineate hot spots.
 3. For each monitoring area, obtain counts by randomly selecting 10 leaves from the infested sections of the canopy (lower mid and/or upper). Tally the number of leaves with mites. Multiply by ten and you have the percentage of infested leaves. If you have Pacific and Willamette mites, tally them separately since the thresholds are different for the two species.
 4. Look for predaceous mites on the 10 leaves. A ratio of 2 leaves with Willamette mites to 1 leaf with predaceous mites is usually adequate for control. A ratio of 4 leaves with Pacific mites to 1 leaf with predaceous mites is usually adequate for control.
 - iii. Thresholds. If you have consistent mite problems and are committed to using soft materials, you will probably want to treat at a relatively low threshold. Otherwise, you

can base your treatment on a combination of: how much damage is currently present; how much canopy your crop needs to ripen; and the location, abundance, and species of mites present. Due to the potentially rapid increase in mite populations and damage (particularly with Pacific mites), it is important to keep monitoring where the mites actually are and not rely solely on damage for monitoring. If you see mite populations building into the canopy, there will be damage there eventually. Heavy populations indicate heavy damage, and vice versa. Do not treat without physically looking at the undersides of leaves for the actual presence of mites. They may not be there. Beneficials can drastically reduce mite populations very quickly.

- iv. Beneficials. Predaceous mites, six-spotted thrips, and other predators work to help keep mite levels in check. Many vineyards have some mites all the time, but rarely have significant damage. This seems to be related to a number of factors including variety, vigor and perhaps microclimate or cover crops.

- **Heads Up:**

- i. Phomopsis - Treating when you see foliar symptoms is a waste of money and a poor stewardship practice
- ii. Grape leafhoppers (GLH) – eggs are present on the undersides of leaves now. Nymphs will be coming out in the next few weeks.
- iii. Botrytis – If you are using an early season treatment program, remember to alternate materials. Do not use multiple applications of the same material. Resistance to Vanguard has developed in some areas. Rotate your botrytis materials to keep that from happening here.
- iv. Eutypa – a good time to start flagging and/or removing symptomatic wood. Remember to really cut back to completely clean wood, or you've wasted the effort.
- v. Grape fanleaf virus (GFLV). Foundation Plant Material Service at UC Davis is now doing commercial testing for GFLV and other pathogens. Spring is the best time for GFLV testing. Wait until fall for leaf roll virus or Pierce's disease testing.

Pest Control Advisor Breakfast Meetings

Pest Control Advisor (PCA) Breakfast Meetings were held at an area restaurant at 7:00 a.m. monthly, from May through August, with a final meeting scheduled for November 5, 2001. A total of 23 Local Pest Control Advisors (PCA's) and 1 Private Applicator (PA) attended these organized meetings.

The agenda usually included old and new business, updated research on new products, and concluded with upcoming events and selecting a next update topic. Topics included discussions on bluegreen sharpshooter trapping, thrips damage and management strategies, soil pest management strategies, cutworm defense, new, soft product information. Timely topics and questions were also encouraged. The August meeting was devoted to Laws and Regulations only.

Lucia Varela, IPM Specialist from University of California Extension and Rhonda Smith, Viticulture Specialist from University of California Extension, participated in the meetings and provides additional technical information for the discussions. These meetings proved to be helpful in gathering key influencers in the grape growing industry to share information and learn new ways of managing pests. The information learned provided additional input to share with other growers who attended the SCGGA Grower Appellation Meetings.

SCGGA Pest Identification Workshop in Spanish

June 6 & 7, 2001

More than seventeen vineyards were represented at two special IPM meetings held in early June to teach vineyard insect and pest disease identification in Spanish. The first meeting was held on Wednesday, June 6, from 8 a.m. to 10 a.m. at Atwood Ranch in Glen Ellen. Daniel Robledo assisted Lucia Varela from Univ. of Calif. Cooperative Extension in describing Willamette mites, grape leafhoppers, glassy-winged sharpshooters (GWSS), and powdery mildew. Large, easy-to-view drawings were used to teach insect identification. Color photos were given out to help vineyard workers and growers learn to identify the various pests and predators. Lucia brought field microscopes for all to view the various sharpshooters close up. Magnifiers were available for sale and most attendees purchased them. Also handed out were large and small posters in Spanish identifying the GWSS.

On the following day, Thursday, June 7, the second workshop was held at Jordan Vineyards in Healdsburg from 8 a.m. to 10 a.m. Rafael Jimenez was kept busy helping Lucia answer questions and explaining the various pests to 60+ vineyard workers and growers. The same format was used as the day before and much interest was shown. All available magnifiers were sold quickly and many posters and handouts were given away.

We heartily thank Jordan Vineyards and Atwood Ranch for providing the sites for these very successful Spanish workshops and look forward to next year. Refreshments were provided and appreciated, as it was a hot day. Continuing Education credits were given to Private Applicators and Pest Control Advisors. The program was funded in part by The California Department of Pesticide Regulation.

IPM/GAM Meeting Notes from June 11,12 & 13, 2001

The June meeting was very well attended at all four sites and makes it really worthwhile to see all the interest and enthusiasm from the Growers. Many important and educational pieces of information were given not only by Laura Breyer, but also from Lucia Varela and Rhonda Smith from the UC Cooperative Extension not to mention all the great questions from the growers themselves.

Powdery mildew, sulfur spraying, mites, sharpshooters, weed control, and grape leaf hoppers were all discussed in varying degrees depending which meeting was attended.

Powdery Mildew

How to detect? There is a musty, mushroomy smell and generally there is high pressure. Also looking at the history of the vineyard, checking the inside of the canopy, and for brown spots on leaf tops and pulling out the laterals can help detect any mildew.

How to treat? Using Ad-Con can give indications of pressure. For prevention, eradicating and protecting, growers have used Kaligreen. Serenade seems promising, but is more expensive than sulfur and comes in organic and inorganic compounds. JMS Stylet Oil has been used also to control the mildew. Since weather conditions have been windy, it's been necessary to stop spraying by 7:00 a.m.

Not much mildew has been seen, a little in Alexander Valley, (mainly due to a poorly designed trellis system), some in Rincon Valley that was treated with sulfur, some in Rohnert Park due to adjacent golf course and lake.

Why is mildew present? The canopies are denser and lusher due to the warm weather and possibly frost damage. Most growers agreed they are behind in canopy management.

Sulfur

Some wineries are forbidding the use of sulfur after bloom and are causing growers to use Kaligreen or JMS Stylet Oil. Water is used but it doesn't kill the spores, just knocks them down even with a wetting agent. Something must be added to eradicate the fungus to keep ahead of the mildew.

Mites

How to detect? They are easier to see than to describe! You will notice yellow or bronzing to russeting on the leaf front. The mites are on the back of the leaf in this area.

Growers used magnifiers to identify the mites on the leaves and a microscope was available at one meeting. Generally, they are down in numbers this year.

How to treat? Generally start with the softest treatment and then go up the ladder. Agrimek has had mixed results. Valero is a cinnamaldehyde.

Sharpshooters

Lucia Varela from UC Cooperative Extension brought four kinds of sharpshooters and one spittle bug to compare and discuss. It was very helpful for everyone to see them up close and to especially notice the differences between the "look-alike sharpshooter" and the blue-green sharpshooter.

Predaceous Pests

Several predaceous pests were discussed. Among them were the Minute Pirate Bug, which is black and white as an adult; the Black Beetle (a mite destroyer), six-spotted thrips, and spiders.

Weed Control

Rhonda Smith discussed UC Research from Kent Dane regarding the advantages of using cover crops. He concluded that they are not much help. It does increase the diversity of insects. However, there are plenty of other reasons to plant a cover crop. Cover crops change the humidity in the vineyards for mites. The old thought for cover crops is that weeds are ugly, but the new thought is maybe weeds are OK. There are two kinds of cover crops to plant. The first being non-native and secondly native. The grasses go for water and are very competitive with the water. Insectaries were discussed and are thought to be a good habitat for beneficials. Lacewings may not be the answer, but conserving natural enemies is the best idea. But nothing hard and fast is known.

Three kinds of machines were discussed. The Clemens, made in Europe, has a weed bar to cut the weeds; the Kimko, American made, is a mower that leaves an island around the vine and also has a head for use in cultivation. The third is A-Speedo, Italian-made, that goes in between the rows and moves a lot of dirt, leaving 6 inches around the vine. However, it breaks down a lot and costs about \$50 an acre.

Grape Leafhoppers

GLH are down in numbers generally speaking this year.

How to detect: There are white spots, which are the nymphs. They are now getting into their peak. They overwinter in prune and apple trees, blackberries, and roses. The GLH lays it's egg underneath the leaf, then the anagrus, a tiny wasp, lays it's eggs in the GLH's egg, making a tiny red spot.

How to treat: Several factors enter in, such as 1. how the winery feels about treating, 2. what is the balance of the canopy?, 3. whether to do leaf removal, 4. to use a soft material such as soaps and oils (harder to control), or to use a hard material like Pravado. It needs to be timed correctly in order to take care of the nymphs, as it's not effective with adult GLH's.. Do herbicidal soaps really work? The problems are residual, not systemic. Obviously, vinegar-based ones would be a problem.

As you can see by now, there was a wide range of information given out, numerous questions, and many good discussions, not to mention the nutbread!!! So...please keep coming, you are all the best!!!!

July 2001 Grower Appellation Meeting Notes

A. What is it?

Anagrus was discussed again with leaf samples provided.

Treatment suggestions were varied—beginning with the “hotspots,” checking them to see if beneficials were working. Everyone agreed seeing less of GLH this year. The winemaker brings in the artistic flavor and the emotional response.

Botrytis is a fungal disease that is a fluffy gray mold appearing on stems, petioles, and clusters. Some growers are seeing it on older chardonnay clusters. Botrytis is caused by spores from the previous season remaining on the infected grape bunches on the vine. Temperature and duration of free moisture, (rain, fog, dew & overhead frost protection) greatly increase the risk of infection.

Treatment varies from using Elevate and Vanguard, to leaf-pulling (it knocks off flower debris). There was also discussion of using electro-static sprayers.

PD Impostors

Measles have bright, definitive patterns on the leaf giving it the “Hawaiian Shirt” design. It can show up on the vine and/or leaf. It looks like sunburn or a potassium deficiency. The fruit is mottled-looking and dries up. When measles infects the vine, it RESPECTS the veins, unlike Pierce’s Disease.

Treatment is limited and there is no rhyme or reason as to how it spreads.

Eutypa shows up on old vines with shriveled berries, and leaves having a zigzag pattern. When the vine is cut in two, you can see a dark color—it looks like canker. The leaves are small and pointy. These characteristics show up more in the Spring.

For treatment, you need to cut back further behind the pie-shape infected areas on the vine.

Mites—Mite damage was viewed on the leaves. Nextar seemed to be a new treatment some were using. Other treatments include: Mindex—cheap; Omite—nasty; Ascorbic Acid—OK; and oil—used early in treatment. Pacific mites are a problem for some growers.

B. Sightings & Discussions

Beneficial Refuges & Cover Crops

Weed identification included: vine weed, spiny clotburr, knot weed, pig weed, night weed, dock weed, smooth cat’s ear, willow weed and mares tale. A **beneficial refuge** is located outside of your vineyard but nearby. It can help, but it is expensive and not always successful. However, it does help with erosion.

Cover Crops are nearby but not UNDER the vines. They provide a home for aphids, minute pirate bugs, thrips, mites and predaceous mites. The lush and more flowers there are in the cover crop, the more beneficials there are. A weed is a plant growing UNDER and AROUND the vine. Roses can attract the anagrus wasp. What you plant for beneficial refuges depends on what you want to eliminate. GLH needs anagrus, so plant roses. Lacewings eat GLH. A problem

could arise as to how vigorous they are and where they are located. They are expensive to eliminate by hand hoeing.

AD-Con readings were brought by several vineyard managers to show the mildew pressure readings. The trend of pressure was decreasing and a rise was beginning to occur. These readings were explained to be a helpful tool or guide in helping to decide on intervals for sulfur treatment.

We were very happy to have some growers bring examples from their vineyards of botrytis and leaf cupping.

We reminded everyone of the upcoming IPM Field Day on Tuesday, August 14 at the SRJC Shone Farm. Again, there was a great turnout and lots of interest and encouraging feedback.

Sonoma County Grape Grower's Association IPM Field Day

August 14, 2001
SRJC Shone Farm

The second Annual SCGGA IPM Field Day was held at SRJC Shone Farm on Tuesday, August 14 from 3 p.m. to 5 p.m. with registration beginning at 2:30 p.m. Nick Frey gave a warm welcome and wrap up of the 2001 IPM Project on a beautiful sunny day to celebrate the culmination of several months of gathering together either at various vineyards around Sonoma County or at local Breakfast Meetings to discuss current ways of integrating various pest management methods in the vineyards. The four vineyard managers, Joe Votek, Duff Bevill, John Clenenden and Keith Horn were on hand to help Laura Breyer, our PCA Specialist, recap the IPM Demonstration Project and compare it with last year's results. Lucia Varela followed with interviews of two vineyard managers, Mike Vail and Jim Rickards, asking their thoughts and opinions on the Pest Identification in Spanish workshops held in June. Professional development for vineyard workers is valued and the workshops contributed to worker recognition and training. Lucia also had the University of California Extension's Glassy-Winged Sharpshooter Video available to view.

Other speakers included Chris Geiger from the California Department of Pesticide Regulation who spoke about "Trends in Pesticide Use." After Hector Bedolla, current president of SCGGA, gave the closing remarks, Leonard Diggs, manager of Shone Farm, treated us all to a surprise. He demonstrated how burlap from India and mulch treatments could effectively be used for weed control in vineyards. Bo Simons supplied informational materials from the Healdsburg Wine Library for all to check out. Laura Breyer had on hand the new **IPM Fieldbooks** for growers. She also explained how the GWSS and SCGGA Databases were used to summarize the summer's results from each of the cooperating vineyards. Joe Browde had an interesting display from the California Pest Management Alliance.

Wine, cheese, salsa & chips and veggie platters served as hors d'oeuvres for the afternoon. Press Releases were sent to ten newspapers, four Agricultural Commissioners' offices, two radio stations (KSRO & KZST), and to Channel 5 and Channel 50 TV. A Blast Fax from the Wineries Association notified wineries. We were delighted that Channel 50 covered this event for those unable to attend. Continuing Education Credits were available to Private Applicators and to Pest Control Specialists.

We are thankful to our wonderful volunteers who assisted with the event: Ron & Judy Loughheed, Leonard Diggs, Paul & Vicki Michalczyk, Keith Horn, Mike & Francine Baldus, and Laura Breyer.